A pacemaker comprising:

- a metallic housing having a first wall with a first opening therein and a second wall with a second opening therein;
- a metallic tubular member having a first tube end disposed in and attached to said first opening and an opposite second tube end disposed in and attached to said second opening, said tubular member being substantially continuous between said first tube end and said second tube end; and
- a plurality of interior components disposed within said tubular member adapted to make electrical contact with contact surfaces of a contact plug adapted for insertion into said tubular member.

A pacemaker as claimed in claim wherein said first and second tube ends are respectively bonded to said metallic housing at said first and second openings.

A pacemaker as claimed in plaim wherein said first and second tube ends are respectively welded to said metallic housing at said first and second openings.

12. A pacemaker as claimed in claim 2 wherein said metallic tubular member has at least one lateral opening therein, and having a contact surface disposed in said opening for establishing electrical contact between the interior of said metallic tubular member and an exterior of said metallic tubular member, said contact surface being electrically connected to at least one of said interior components.

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A pacemaker as claimed in claim 1/2 further comprising an insulating ceramic plug disposed in and closing said opening, said ceramic plug being mechanically attached in said opening/and holding said contact surface in said opening.

A pacemaker as claimed in claim 1/2 wherein said ceramic plug is soldered in said opening.

A pacemaker as claimed in claim 13 wherein said ceramic plug is bonded in said opening.

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A pacemaker as claimed in/claim 13 wherein said contact surface is a metallic ring and wherein said/ceramic plug has an exterior with a lateral opening therein in registry with said lateral opening in said metallic tubular member allowing access to said ring from said exterior of said metallic tubular member. 14

15 A pacemaker as claimed in claim 16 wherein said metal ring has a central portion which is free of ϕ eramic of said ceramic plug, producing a peripheral groove at an interior df said ring allowing access to said ring from said interior of said metallic tubular member.

A pacemaker as claimed in claim & further comprising a locking arrangement disposed at said second tube end, and accessible from said second tube end, adapted fof locking an end of an electrode lead in said metallic tubular member.

A pacemaker as claimed in claim 18 wherein said locking arrangement is at least partially removable from said metallic tubular member to allow access to said end of said electrode lead.

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